

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims as amended.

Claims 1- 19 are pending in the application. No claims are yet allowed. Claims 1 - 19 are rejected. Claims 1, 2, 12 and 19 are amended herein. No claims are cancelled and no new claims are added by this amendment.

In accordance with the revised provisions of 37 C.F.R. §1.121(c) as enacted on July 30, 2003, a marked up version of the amended claims is provided above.

The Examiner rejects Claims 15 and 18 under 35 U.S.C. §112 second paragraph as being indefinite.

The Examiner asserts that claims 14 and 15 have inconsistent limitations. Applicants would like to point out that both claims 14 and 15 depend from claim 13 and thus the limitations are not inconsistent (it appears that the Examiner believed that Claim 15 depended from Claim 14 but as point out above, Claim 15 depends from Claim 13 and not Claim 14).

Similarly, the Examiner asserts that claims 17 and 18 have inconsistent limitations. Applicants would like to point out that both claims 17 and 18 depend from claim 16 and thus the limitations are not inconsistent (it appears that the Examiner believed that Claim 18 depended from Claim 17 but as pointed out above, Claim 18 depends from Claim 16 and not Claim 17).

In view of the above, Applicants submit that the rejection of Claims 15 and 18 under 35 U.S.C. §112, second paragraph, should be removed.

The Examiner rejects Claims 1-6, 10-15, 17 and 19 under 35 U.S.C. §102(b) as being anticipated by Yoshida (U.S. Patent number 5,767,009).

To sustain a rejection under 35 U.S.C. §102(b), a single reference must disclose each and every element of the claimed invention. In this case, the Yoshida reference fails to describe “...an interface disposed between a first surface of the first semiconductor structure and a first surface of the second semiconductor structure, the interface having at least a first portion adapted to provide a communication interface between the first semiconductor structure and the second semiconductor structure and at least a second portion adapted to reduce electrical interference between signals propagating along the first semiconductor structure and signals propagating along the second semiconductor structure with at least one of the first and second interface portions corresponding to a conductive bonding interface which secures the first surface of the first semiconductor structure to the first surface of the second semiconductor structure ...” as called for in Claim 1.

In view of the above, Applicants submit that Claim 1 is patentably distinct over the cited reference.

Claims 2-6, 10-15, 17 and 19 each depend, either directly or indirectly, from base Claim 1 and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 2-6, 10-15, 17 and 19 are also patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 1.

With respect to Claims 2, 4 – 6 and 12-19, the Examiner asserts that Yoshida discloses an electrically conductive adhesive material as called for in each of these claims. Applicants submit that each of these claims are further patentably distinct over Yoshida, since Yoshida neither describes nor suggests an electrically conductive adhesive material as called for in each of Claims 2, 4 – 6 and 12-19.

For example, on page 3 of the Office Action dated January 26, 2005, the Examiner points to Col. 6 lines 12-16 of Yoshida as describing an electrically conductive adhesive material. However, Applicants have reviewed the Columns and lines relied upon by the Examiner and do

not find any reference to an interface comprising an electrically conductive adhesive material as called for in Claim 2. In fact, the lines of Yoshida relied upon by Douglas W. Owens, the Examiner, do not make reference to any adhesive material. Thus, Applicants submit that Claim 2 is further patentably distinct over the cited reference since the reference neither describes nor suggests that “...the first portion of the interface includes an electrically conductive adhesive material which secures the first surface of the first semiconductor structure to the first surface of the second semiconductor structure ...” as called for in Claim 2.

Similarly, on page 3 of the Office Action dated January 26, 2005, the Examiner points to Col. 4 lines 65-68 and Col. 7, lines 39-45 of Yoshida as describing an electrically conductive adhesive material. However, Applicants have reviewed the Columns and lines relied upon by the Examiner and do not find any reference to an interface comprising an electrically conductive adhesive material as called for in Claim 4. These passages refer to an “electro-conductive foil” not an electrically conductive adhesive material. Thus, Applicants submit that Claim 4 is further patentably distinct over the cited reference since the reference neither describes nor suggests that “..the first portion of the interface includes an electrically conductive adhesive material which secures the first surface of the first semiconductor structure to the first surface of the second semiconductor structure ...” as called for in Claim 4.

In view of the above, Applicants submit that the rejection of Claims 1-6, 10-15, 17 and 19 under 35 U.S.C. §102(b) should be removed.

The Examiner rejects Claims 7-9 and 19 under 35 U.S.C. §103(a) as being unpatentable over Yoshida (U.S. Patent number 5,767,009) in view of Holm (U.S. Patent number 5,940,683).

Each of claims 7-9 and 19 depend either directly or indirectly from independent Claim 1 and thus includes the limitations of Claim 1. Thus, Applicants submit that Claims 7-9 and 19 are patentably distinct over the combination relied upon by the Examiner since the references neither describe nor suggest “...an interface ... having ... a first portion adapted to provide a communication interface between the first and second semiconductor structures and ... a second

portion adapted to reduce electrical interference between signals propagating along the first and second semiconductor structures with at least one of the first and second interface portions corresponding to a conductive bonding interface which secures the first surface of the first semiconductor structure to the first surface of the second semiconductor structure ...” as called for in each of Claims 7-9 and 19.

Applicants submit that Claim 7 is further patentably distinct over the cited references since the references neither describe nor suggest that ... the interface includes a first portion corresponding to an electrically conductive adhesive material which secures the first surface of the first semiconductor structure to the first surface of the second semiconductor structure and a second portion which includes a dielectric adhesive material ... as called for in Claim 7.

Claim 8 depends from and thus includes the limitations of Claim 7 and thus is patentably distinct over the cited references generally for the reasons discussed above in conjunction with Claim 7.

Applicants submit that Claim 8 is further patentably distinct over the cited reference since the references neither describe nor suggest that the dielectric adhesive material includes an organic material as called for in Claim 8.

Claim 9 depends from and thus includes the limitations of Claim 7 and thus is patentably distinct over the cited references generally for the reasons discussed above in conjunction with Claim 7.

Applicants submit that Claim 9 is further patentably distinct over the cited references since the references neither describe nor suggest that the dielectric adhesive material includes an inorganic material as called for in Claim 9.

Applicants submit that Claim 19 is further patentably distinct over the cited references since the references neither describe nor suggest that both the first and second portions of said interface are provided from an electrically conductive bonding material as called for in Claim 19.

Thus, in view of the above amendment and remarks, Applicants submit that the rejection of Claims 7-9 and 19 under 35 U.S.C. §103 is improper and should be removed.

Accordingly, in view of the above amendments and remarks, Applicants submit that Claims 1-19 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

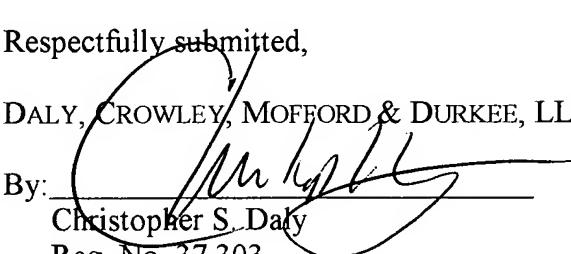
The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Dated: 24 MAY 05

Respectfully submitted,

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